Procedures to Address the Chedoke Creek Combined Sewage Spill

Operations and Maintenance Manual:

In response to the Chedoke Creek combined sewage spill, process control narratives, drawings and standard operating procedures were reviewed and updated for all combined sewer overflow facilities to ensure that critical equipment and environmental discharge points were identified and the requirements relating to annual manual valve position checks, monthly visual inspections and annual flow meter calibrations were included in the updated Operations and Maintenance Plan documents.

The report entitled "City of Hamilton CSO Facilities O&M Plan – MECP Order Item 6" (Hatch, January 31, 2019) is a summary of the updated Operations & Maintenance Plan for the City's combined sewer overflow facilities. The Operations and Maintenance Plan includes an updated standard operating procedure for each of the combined sewer overflow facilities which are reviewed every three years or sooner if required. The standard operating procedures document responsibilities of Hamilton Water staff, detailed operations information, safety procedural information, technical description of the equipment at the facility, Supervisory Control and Data Acquisition screen drawings, dry and wet weather operations processes, and inspection processes.

The following is a list of the standard operating procedures included in the Operations and Maintenance Plan:

- Detailed Sewer System Operation Greenhill CSO Tank #1 (HCS01) (PW-WW-PO-P-011-HCS01-1004-001)
- Detailed Sewer System Operation Bayfront Park CSO Tank (HCS02) (PW-WW-PO-P-011-HCS02-1004-002)
- Detailed Sewer System Operation James Street CSO Tank (HCS03),
 Ferrie/Mary Sluice Gates (HCG08) (PW-WW-PO-P-011-HCS03-1004-003)
- Detailed Sewer System Operation Main/King CSO Tank (HCS04) (PW-WW-PO-P-011-HCS04-1004-004)
- Detailed Sewer System Operation Eastwood Park CSO Tank (HCS05), Burlington/Ferguson Sluice Gate (HCG06), Ferrie/Ferguson Sluice Gate (HCG07) (PW-WW-PO-P-011-HSC05-1004-005)
- Detailed Sewer System Operation Greenhill CSO Tank #2 (HCS06) (PW-WW-PO-P-011-HCS06-1004-001)
- Detailed Sewer System Operation Red Hill CSO Pipe Facility (HCS07) (PW-WW-PO-P-011-HCS07-1004-001)
- Detailed Sewer System Operation Royal Avenue CSO Tank (HCS08) (PW-WW-PO-P-011-HCS08-1004-001)
- Detailed Sewer System Operation McMaster CSO Tank (HCS09) (PW-WW-PO-P-011-HCS08-1004-001)
- Detailed Sewer System Operation Wentworth/Rosemary Sluice Gate (HCG03) (PW-WW-PO-P-011-HCG03-1004-053)

- Detailed Sewer System Operation Brampton/Strathearne Sluice Gate (HCG04) (PW-WW-PO-P-011-HCG04-1004-054)
- Detailed Sewer System Operation Wellington/Burlington Sluice Gates (HCG14) (PW-WW-PO-P-011-HCG14-1004-056)
- Detailed Sewer System Operation Parkdale Burlington Wastewater Collection Station (HC001) (PW-WW-PO-P-011-HC051-1001-051)

The Operations and Maintenance Plan also includes an updated process control narrative for the Main / King combined sewer overflow tank. The process control narrative includes an overview of the facility, a reference to facility drawings, detailed descriptions of equipment and instrumentation, as description of control modes, dry and wet weather operational processes, sampling requirements and equipment control logic. Process control narratives for the remaining facilities were reviewed however no revisions were required. As a result, they were not included in the Operations and Maintenance Plan report however they are maintained as key operational documents for the facilities.

Sewage Discharge Response and Notification Procedure:

The following procedures were developed or updated in response to the Chedoke Creek combined sewage spill:

- Overflow Response Plan for Wastewater Pumping Stations and CSO Tanks (PW-WW-PO-P-1000-011-001)
- Distribution and Posting of Federal and Provincial Orders (PW-P-008-002).

The Overflow Response Plan for Wastewater Pumping Stations and CSO Tanks (PW-WW-PO-P-1000-011-001) procedure provides instructions on how to respond to a wet well surcharge and overflows at wastewater pumping stations and combined sewer overflow tanks. The procedure was updated to describe the process to update the public facing website Monitoring Wastewater Overflows and Bypasses developed in 2020 to provide further transparency on wastewater treatment bypasses and combined sewage overflows.

The Distribution and Posting of Federal and Provincial Orders (PW-P-008-002) procedure documents the process to ensure that Council receives notification of all Federal and Provincial Orders, ensure all Orders are posted and made available to the public on the City website and, distributed, if required, as specified by the Order. Specifically, Directors are required to ensure all Orders received by a Division are made available to the public on the website Ministry Orders.